

REMARKS

By this amendment, claims 1-11 have been cancelled, and claims 12-22 have been added. Thus, claims 12-22 are now active in the application. Reexamination and reconsideration of the application are respectfully requested.

The specification and abstract have been carefully reviewed and revised to make grammatical and idiomatic improvements in order to aid the Examiner in further consideration of the application. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification and Abstract by the current amendment. The attachment is captioned "**Version with markings to show changes made.**"

In items 1-6 on pages 2-6 of the Office Action, claims 1, 2, 4 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kfoury (U.S. 6,549,789) in view of Shigeo (JP 08-179851); claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kfoury in view of Shigeo and Nakamura (U.S. 2002/0009192); claims 5, 6, 8 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kfoury in view of Shigeo and Hijii (U.S. 2002/0119802); claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kfoury in view of Shigeo, Hijii and Nakamura; and claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kfoury in view of Shigeo and Higginbotham et al. (U.S. 5,896,575). These rejections are believed moot in view of the cancellation of claims 1-11. Furthermore, these rejections are believed clearly inapplicable to the new claims 12-22, for the following reasons.

With exemplary reference to the drawing figures, new independent claim 12 sets forth an information processing apparatus comprising: a main body 1 having a first contact-free sensor element 10; a display unit 2 having a second contact-free sensor element 11; a hinge arrangement 5 coupling the main body 1 and the display unit 2 for movement relative to each other; wherein the main body 1 has an operation panel 6; wherein the display unit 2 has a display panel 3 and a

back panel 4; wherein the hinge arrangement 5 is configured such that the display unit 2 is movable between at least an open position (see Fig. 1) in which the display unit 2 is separated away from the main body 1, a first closed position (see Fig. 2A) in which the display unit 2 is closed over the main body 1 with the display panel 3 of the display unit 2 facing the operation panel 6 of the main body 1, and a second closed position (see Fig. 2B) in which the display unit 2 is closed over the main body 1 with the back panel 4 of the display unit 2 facing the operation panel 6 of the main body 1 and the display panel 3 of the display unit 2 facing away from the operation panel 6 of the main body 1; wherein the first contact-free sensor element 10 and the second contact-free sensor element 11 are arranged such that, when the display unit 2 is disposed in one of the first and second closed positions (Figs. 2A, 2B) over the main body 1, the first contact-free sensor element 10 and the second contact-free sensor element 11 face each other so as to output a first signal indicating that the display unit 2 is disposed in the one of the first and second closed positions (Figs. 2A, 2B), and when the display unit 2 is disposed in the other of the first and second closed positions over the main body 1, the first contact-free sensor element 10 and the second contact-free sensor element 11 do not face each other so as to output a signal indicating that the display unit 2 is disposed in the one of the first and second closed positions; and wherein a display processor 9 is provided to receive the first signal indicating that the display unit 2 is disposed in the one of the first and second closed positions and, upon receiving the first signal indicating that the display unit 2 is disposed in the one of the first and second closed positions, to cause rotation of a display of the display panel 3.

Thus, with the arrangement as recited in independent claim 12, and with exemplary reference to the particular embodiment shown in Figs. 1-2B, an information processing apparatus (e.g., personal computer) having an openable and closeable display unit 2 can be manipulated to either be in the open position shown in Fig. 1, the first closed position shown in Fig. 2A in which the display panel 3 is facing downwardly against the main body 1, or the second closed position shown in Fig. 2B in which the display panel 3 faces upwardly away from the main body 1 and thus can be used, for example, as an input tablet. The first and second contact-free sensor

elements 10, 11 are arranged in the embodiment so that, when the display unit 2 is manipulated to its first closed position in which the display panel 3 faces downwardly toward the main body 1, the first and second sensor elements do not face each other and thus do not cause output of a signal indicating that the display unit is disposed in the second closed position, whereas when the display unit 2 is manipulated to be disposed in the second closed position (Fig. 2B) in which the display panel 3 faces upwardly away from the main body 1, the first and second sensor elements 10, 11 cause output of a signal indicating this second closed position. The display processor 9 receives the signal indicating that the display unit is disposed in the particular closed position, and then causes rotation of a display of the display panel. For example, the purpose of the rotation of the display is that, when used in the position of Fig. 1, the display is to be viewed by a person sitting in front of the main body 1 (e.g., with the bottom of the display being adjacent the hinge 5), whereas when the apparatus is used, for example, as a tablet input device, in the position shown in Fig. 2B, it is desirable for the display of the display panel 3 to be rotated so that the bottom of the display is at the end of the display opposite of the hinge 5.

The arrangement of the first and second contact-free sensor elements 10, 11 in the manner required by claim 12 allows for the required functionality to be attained with a minimum number of components and in a simple and reliable manner.

In contrast to the present invention of claim 12, the Kfoury patent discloses an apparatus having a main body 202 and a display unit 204 where the display unit can be manipulated between an open position (Fig. 2), a first closed position (Fig. 10) and a second closed position (Fig. 12), but does not disclose or suggest the first and second contact-free sensor elements and the display processor such as those specifically recited in claim 12.

More specifically, as described in the Kfoury patent column 6, lines 46-65, a first detector 228 is located in the main body 202 at the free end thereof, and a first magnet 222 is located in the display unit 204 at the free end thereof so as to become "substantially adjacent to the first detector 228 when the housing is rotated to the first, second, third and fourth closed positions Fig. 10, Fig. 11, Fig. 12, Fig. 13 respectively." Thus, according to the Kfoury patent, the hand

held device thereof is provided with first and second sensor elements 222, 228 which are arranged so that they become adjacent one another in any of the positions illustrated in Figs. 10, 11, 12 and 13 (i.e. in any of the closed positions). Therefore, the sensor elements 222 and 228 provide an indication only that the hand held device of the Kfoury patent is in a closed position (i.e., in any one of the four possible closed positions illustrated in Figs. 10-13), it does not indicate which rotary position the display unit 204 is in (either the rotary position shown in Figs. 10 and 11 or the rotary position shown in Figs. 12 and 13). Accordingly, the sensor elements 222 and 228 of the Kfoury patent cannot be said to correspond to the first and second contact-free sensor elements recited in claim 12 which are required to be arranged such that, when the display unit is disposed in one of the first and second closed positions (Figs. 2A and 2B), the first and second contact-free sensor elements face each other so as to output a first signal indicating that the display unit is disposed in that one of the first and second closed positions and, when the display unit is disposed in the other of the first and second closed positions over the main body, the first and second contact-free sensor elements do not face each other so as to output a signal indicating that the display unit is disposed in that one of the first and second closed positions.

At column 6, line 66 - column 7, line 13 of the Kfoury patent, two additional sensor elements 224, 226 are described as being provided in the display unit 204 and the main body 202, respectively, such that, when the display unit 204 is in a first rotary position, the sensor element 224 aligns with the sensor element 228 thereby causing output of a second position signal to the microprocessor 103.

Thus, it is clear that, in the Kfoury arrangement, in order to provide a signal indicating that the display unit 204 is in a particular one of the closed positions (e.g. either that shown in Figs. 10 and 11 or that shown in Figs. 12 and 13), four separate sensor elements (222, 228, 224 and 226) are required.

On the other hand, as described above, with the present invention in which the first and second contact-free sensor elements are arranged to face each other and output a first signal indicating that the display unit is disposed in one of the first and second closed positions when

the display unit is in fact in that one of the first and second closed positions, but do not face each other so as to output such a signal indicating that the display unit is disposed in that one of the first and second closed positions when the display unit is disposed in the other of the first and second closed positions. Accordingly, the present invention provides a simplified arrangement requiring only two sensor elements to provide the required functionality due to the particular configuration as recited in claim 12.

The Examiner cited the Shigeo reference for teaching that "a display unit (5) can be rotated based on a detecting signal sen[t] to a display processor (7, 10)." However, the Shigeo reference provides no teaching or suggestion that would have obviated the above-discussed shortcomings of the Kfoury patent.

Therefore, for the above reasons, it is believed apparent that the features recited in claim 12 are not disclosed or suggested in the Kfoury and Shigeo references. Accordingly, a person having ordinary skill in the art would not have found it obvious to modify the Kfoury arrangement or to make any combination of the references of record in such a manner as to result in or otherwise render obvious the present invention of claim 12.

The Examiner also cited the Nakamura reference for teaching first and second contact-free sensors (4b, 4a) constituted by a magnet and a magnetic sensor, respectively. The Examiner cited the Hijii reference for teaching "an information processing apparatus comprising a third contact-free sensor means (7 or 8) for send[ing] a second signal to the power saver to cutoff the power source of the display panel (5) when the third contact-free sensor means (7 or 8) and a second contact-free sensor means (8 or 7) are placed face to face." The Examiner cited the Higginbotham patent for teaching a "touch display panel (114, 108)." However, the Nakamura, Hijii and Higginbotham references provide no teaching or suggestion that would have obviated the above-mentioned shortcomings of Kfoury and Shigeo references.

As such, it is respectfully submitted that a person having ordinary skill in the art would not have found it obvious to modify the Kfoury reference or to make any combination of these references of record so as to result in or otherwise render obvious the present invention of claim

12. Therefore, it is respectfully submitted that claim 12, as well as claims 13-22 which depend therefrom, are clearly allowable over the prior art of record.

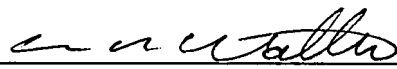
The Examiner's attention is also directed to the dependent claims 13-22 which set forth additional features of the present invention and further define the invention over the prior art.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Hirotooshi SUGIHARA

By: 
Charles R. Watts
Registration No. 33,142
Attorney for Applicant

CRW/asd
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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